

**From:** [Larson, Darrin](#)  
**To:** [Gray, David](#)  
**Subject:** Thanks-Re: summary  
**Date:** Monday, September 4, 2017 7:07:03 AM

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Sent from my iPhone

On Sep 4, 2017, at 6:58 AM, Gray, David <[gray.david@epa.gov](mailto:gray.david@epa.gov)> wrote:

EPA has 143 personnel supporting the response efforts for Hurricane Harvey and have established a Unified Command with other state and federal partners, and are in the field conducting work. Working together, the U.S. Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ) continue to coordinate with local, state and federal officials to address the human health and environmental impacts of Hurricane Harvey and its aftermath, especially the water systems in the affected areas. TCEQ response information is available at

<https://www.tceq.texas.gov/response/hurricanes> .

Arkema Plant Fire Update

It is the understanding of personnel on the ground that the remaining trailers are at risk of catching fire over the next few days. Rather than risk additional damage to the facility or spreading into the surrounding area, the Crosby Volunteer Fire Department and the Harris County Fire Marshal's Office will perform a controlled burn of the material.

First responders are outside the 1.5-mile area of evacuation zone, but remain in the area, for quick response to ensure the safety of the community around the facility. We continue to monitor smoke and air quality, the potential for additional fires in the area, and have aerial assets ready to be deployed, as needed. Everyone in the area should follow the safety instruction of local authorities, specifically staying out of the evacuation zone, avoiding smoke and flood waters. As with all smoke, people can limit the potential for adverse health effects by limiting their exposure. This includes staying indoors with doors and windows closed and running the air conditioning (if possible) with the fresh intake closed. If it is absolutely necessary to be outdoors, try to move out of the plume of smoke and minimize heavy work, exercise, or children's playtime.

### Flood Water

Water quality sampling will be focused on industrial facilities and hazardous waste sites. Floodwaters contain many hazards, including bacteria and other contaminants. Precautions should be taken by anyone involved in cleanup activities or any others who may be exposed to flood waters. These precautions include heeding all warnings from local and state authorities regarding safety advisories. In addition to

the drowning hazards of wading, swimming, or driving in swift floodwaters, these waters can carry large objects that are not always readily visible that can cause injuries to those in the water. Other potential hazards include downed power lines and possible injuries inflicted by animals displaced by the floodwaters.

### Air Monitoring

Monitors are showing that air quality at this time is not concerning and local residents should not be concerned about air quality issues related to the effects of the storm. Due to quick action and proper preparation by state authorities, all the ambient air quality monitors in the network from south of Corpus Christi to Beaumont were protected before the storm. Since then, state authorities are working to get the systems up and running again. As of Saturday, September 2, over 88 percent of monitors are up and working again in Corpus Christi, 85 percent in Houston, and 36 percent in Beaumont. Of the available air monitoring data collected from August 24-September 2, 2017, all measured concentrations were well below levels of health concern. Monitors are showing that air quality at this time is not concerning, and local residents should not be concerned about air quality issues related to the

effects of the storm.

EPA has its surveillance aircraft conducting air monitoring for the Arkema plant fire. Also, EPA's mobile air-monitoring unit will be in Houston to assist with air monitoring as well. Also, EPA's mobile air monitoring Trace Atmospheric Gas Analyzer bus is on the way to Houston to assist with air monitoring as well. The TAGA is a self-contained mobile laboratory capable of real-time sampling and of outdoor air or emissions. The instrumentation refers both to the analytical instrument and the mobile laboratory built around it.

Drinking Water (as of 9/2)

Half (2300) of the 4500 drinking water systems potentially affected by Harvey have been contacted. Of those: 1514 systems are fully operational, 166 have boil-water notices, and 50 are shut down. The agencies are contacting remaining systems to gather updated information of their status. Assistance Teams are in the field working directly with system operators to expedite bringing systems back to operational status. Additional drinking water assessments should be up and running within the next day.

Waste Water and Sewage (as of 9/2)

Currently, 1656 of approximately 2469 wastewater treatment plants are fully operational in the affected counties. The agencies are aware that releases of wastewater from sanitary sewers that is occurring, due to the historic flooding and are actively working to monitor facilities that have reported spills, conduct outreach and provide technical guidance to all other wastewater facilities in flood-impacted areas. EPA and TCEQ are working closely with the U.S. Coast Guard, the Texas Military Department, and other local and state agencies to continuously monitor wastewater systems. Houston's unified command will be up and running shortly to support water testing. Assistance Teams will be deployed to work directly with system operators to expedite bringing systems back to operational status.

Residential Wells: EPA is developing a plan for sampling residential wells, and is coordinating with TCEQ to establish several locations where residents can bring water samples from their wells to be tested.

#### Superfund Hazardous Waste Sites

EPA has conducted initial assessments at 41 Superfund sites in the impacted areas using aerial images, as well as direct contact with the parties responsible for on-going cleanup activities. EPA has determined that 28 Superfund sites in the area do not

currently show damage or excessive flooding associated with Harvey. EPA determined that 13 sites have been flooded and/or are experiencing possible damage due to the storm. Of these sites, two (Falcon Refinery and the Brine Service) have been inspected and it has been determined that they do not require emergency cleanup; although, additional sampling in the area will continue to be conducted. Eleven sites, including: Bailey Waste Disposal, French LTD, Geneva Industries/Fuhrmann Energy, Gulfco Marine, Highland Acid Pit, Malone Services, U.S. Oil Recovery, Patrick Bayou, Petro-Chemical Systems, Triangle Chemical, and San Jacinto Waste Pits have not been accessible by response personnel. Teams are in place to investigate possible damage to these sites as soon flood waters recede, and personnel are able to safely access the sites. The San Jacinto Waste Pits site has a temporary armored cap designed to prevent migration of hazardous material; the cap will be inspected as soon as it is safe for teams access the site. Based on forecasted river conditions, this inspection is planned for Monday, by boat. EPA has dive teams to survey the cap underwater when conditions allow.

#### Refineries/Fuel Waivers

In addition to waivers for 38 states and D.C., EPA

signed four No Action Assurance (NAA) letters on September 1, to help address fuel shortages. NAA will help expedite the distribution of existing gasoline supplies to both Texas and Louisiana, while the refineries work to re-start and resume normal operations. Each is effective until September 15, 2017, and should allow for the distribution in Texas of 10 million or more gallons of gasoline to consumers.